

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1 - 17 (Cancelled)

18. (Currently Amended) A method for enabling a mobile device to roam between a first wireless network and a second wireless network, the first wireless network substantially heterogeneous with the second wireless network, both the first wireless network and the second wireless network capable of communicating with an intermediary network, and the mobile device capable of accessing the first wireless network and the second wireless network, the method comprising the computer-implemented steps of:

receiving a request at the first wireless network to access the second wireless network, the first wireless network substantially heterogeneous with the second wireless network, and the request being on behalf of the mobile device and indicating a network system specifying the second wireless network;

through the intermediary network via the first wireless network, obtaining an access identifier for the second wireless network, the access identifier for use by the mobile device when accessing the second wireless network; and

providing to the mobile device via the first wireless network, the access identifier for the mobile device to use when accessing the second wireless network; and

providing a virtual representation of the first wireless network at the second wireless network by emulating a gateway of the first wireless network by supporting protocols of the first wireless network at the second wireless network, thereby allowing the mobile device to seamlessly access the second wireless network via the first wireless network using the access identifier.

19. (Original) The method of claim 18, wherein the first wireless network is a wireless local

area network, the second wireless network is a cellular telecommunications network, and the mobile device is a personal digital assistant.

20. (Original) The method of claim 18, wherein the request includes a user identification of a user of the mobile device, and the step of receiving the request includes determining an identity of the network system as a function of the user identification.

21. (Original) The method of claim 18, wherein the step of obtaining the access identifier includes providing an authentication request based on the request to a dynamic host configuration server.

22. (Original) The method of claim 18, wherein the access identifier is an internet protocol address and the intermediary network is the internet.

23. (Original) The method of claim 18, wherein the step of obtaining the access identifier includes requesting the access identifier from a network gateway for the second wireless network, the network gateway providing the access identifier from a predefined range of access identifiers allocated to the second wireless network.

24. (Original) The method of claim 18, wherein the step of providing the access identifier includes storing the access identifier in a device database that includes a device identification for the mobile device.

25. (Currently Amended) A network gateway for enabling a mobile device to roam between a first wireless network and a second wireless network, the first wireless network substantially heterogeneous with the second wireless network, both the first wireless network and the second wireless network capable of communicating with an intermediary network, and the mobile device capable of accessing the first wireless network and the second wireless network, the network gateway comprising:

a digital processor that hosts and executes a gateway application for receiving a request

to access the second wireless network, the gateway application and the mobile device associated with the first wireless network, and a communications interface coupled with the gateway application, the gateway application configuring the digital processor to:

receive the request through the communication interface and the initial wireless network to access the second wireless network, the first wireless network substantially heterogeneous with the second wireless network and the request being on behalf of the mobile device and indicating a network system specifying the second wireless network;

obtain through the communications interface, ~~and~~ the intermediary network and via the first wireless network, an access identifier for the second wireless network, the access identifier for use by the mobile device when accessing the second wireless network, ~~and~~

provide through the communications interface and via the first wireless network the access identifier to the mobile device to use when accessing the second wireless network; and

provide a virtual representation of the first wireless network at the second wireless network by emulating a gateway of the first wireless network by supporting protocols of the first wireless network at the second wireless network, thereby allowing the mobile device to seamlessly access the second wireless network via the first wireless network using the access identifier.

26. (Original) The network gateway of claim 25, wherein the first wireless network is a wireless local area network, the second wireless network is a cellular telecommunications network, and the mobile device is a personal digital assistant.

27. (Original) The network gateway of claim 25, wherein the request includes a user identification of a user of the mobile device, and the gateway application configures the digital processor to determine an identity of the network system as a function of the user identification.

28. (Original) The network gateway of claim 25, wherein the gateway application configures the digital processor to provide through the communications interface an authentication request

based on the request to a dynamic host configuration server.

29. (Original) The network gateway of claim 25, wherein the access identifier is an internet protocol address and the intermediary network is the internet.

30. (Original) The network gateway of claim 25, wherein the gateway application configures the digital processor to request through the communications interface the access identifier from a second network gateway for the second wireless network, the second network gateway providing the access identifier from a predefined range of access identifiers allocated to the second wireless network.

31. (Original) The network gateway of claim 25, wherein the gateway application configures the digital processor to store the access identifier in a device database that includes a device identification for the mobile device.

32. (Currently Amended) A computer program product that includes a computer usable medium having computer program instructions stored thereon for enabling a mobile device to roam between a first wireless network and a second wireless network, the first wireless network substantially heterogeneous with the second wireless network, both the first wireless network and the second wireless network capable of communicating with an intermediary network, and the mobile device capable of accessing the first wireless network and the second wireless network, such that the computer program instructions, when performed by a digital processor, cause the digital processor to:

receive a request at the first wireless network to access the second wireless network, the first wireless network substantially heterogeneous with the second wireless network and the request being on behalf of the mobile device and indicating a network system specifying the second wireless network;

through the intermediary network and via the first wireless network, obtain an access identifier for the second wireless network, the access identifier for use by the mobile device when accessing the second wireless network; and

provide, via the first wireless network, the access identifier to the mobile device to use when accessing the second wireless network; and

provide a virtual representation of the first wireless network at the second wireless network by emulating a gateway of the first network by supporting protocols of the first network at the second wireless network, thereby allowing the mobile device to seamlessly access the second wireless network via the first wireless network using the access identifier.

33. (Previously Presented) The method of claim 22 wherein the request at the first wireless network to access the second wireless network includes the internet protocol address.

34. (Previously Presented) The network gateway of claim 29 wherein the request at the first wireless network to access the second wireless network includes the internet protocol address.